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ABSTRACT

A staff and organizational development program was designed to foster the use of research to improve instructional effectiveness at the elementary level by monitoring and managing key classroom variables related to student achievement. A classroom improvement program, called the Basic Skills Instructional Improvement Program (BSIIP), was developed in 1977-1981 and expanded in 1981-1984 to focus on the implications of research on effective schools, effective school districts, and also on the literature on educational change. The outcome was known as Achievement Directed Leadership (ADL). Description of the BSIIP focuses on: (1) key perspectives and understandings shaping program development; (2) classroom variables warranting regular monitoring by teachers and administrators, including prior learning, student engaged time, criterion content coverage, and daily success, mastery, and review; (3) a four-phase improvement cycle for using research findings to improve instructional effectiveness and student performance on focal classroom variables; (4) strategies for developing and implementing BSIIP centering on transportability and enhancing positive participation of administrators and teachers; (5) conclusions reached as a result of developing and implementing the BSIIP; and (6) inclusion of BSIIP in Maryland's program for School Improvement Through Instructional Processes. Evaluation of program implementation and its apparent effects in three school districts indicates gains in student achievement across all grades in reading and math. (RH)

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USING RESEARCH TO IMPROVE INSTRUCTIONAL EFFECTIVENESS, EVOLUTION OF ACHIEVEMENT DIRECTED LEADERSHIP (ADL)

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USING RESEARCH TO IMPROVE INSTRUCTIONAL EFFECTIVENESS, EVOLUTION OF ACHIEVEMENT DIRECTED LEADERSHIP (ADL)

It was the view of some researchers a dozen years ago that educational reformers would be wise to proceed slowly, if at all. They agreed that there simply was not enough research to make any firm statement about the nature of effective teaching (Rosenshine & Furst, 1973). But researchers were learning much about instructional effectiveness at the elementary school level even then, as their reports would shortly disclose (e.g., Bloom, 1976; Brady et al., 1977; Brophy & Evertson, 1974; Dunkin & Biddle, 1974; Fisher et al., 1978; Good & Grouws, 1979; Stallings & Kaskowitz, 1974). Along with many others, we at Research for Better Schools, Inc. (RBS) were of the opinion that we needed to begin finding ways of using research findings to improve instruction even before we could make firm statements about all the dimensions of instructional effectiveness. Indeed, the invention of efficient and reliable ways to use the findings seemed an important prerequisite to their validation.

In this paper, I will describe the development by RBS and several educator partners of a program of staff and organizational development designed to foster the use of research to improve instructional effectiveness at the elementary level. The emphasis of the program is monitoring and management of key classroom variables that are related to student achievement.

Development of the program occurred in two distinct phases. The first phase spanned the years 1977-1981 and was devoted mainly to the development of elements of a classroom improvement program. At that time the program was called the Basic Skills Instructional Improvement Program (BSIIP).

Users of this program, including School Improvement Through Instructional Processes (SITIP) educators in Maryland, experienced varying degrees of success with program implementation. Subsequently, we expanded BSIIP to give much more attention to the implications of research on effective schools (e.g., Edmonds, 1979; Weber, 1977; Wellisch et al., 1978), effective school districts (e.g., Berman & McLaughlin, 1979; Pincus & Williams, 1979), and to the literature on educational change (e.g., Fullan, 1981; Joyce, 1982; Joyce & Showers, 1980; Rosenblum & Louis, 1981). The metamorphosis of BSIIP took place over the years 1981-1984 and the outcome came to be known as Achievement Directed Leadership (ADL).

Basic Skills Instructional Improvement Program, 1977-1981

The development of BSIIP was shaped by our perspectives on teaching and educational change. These views were the products of RBS' past experience with development and implementation of research-based instructional systems, as well as the reported experiences of other researchers and developers. It is also true that our program development plans were influenced by our appreciation of the need for educational agencies in our region to respond to public concern over low student achievement, and our understanding of the school improvement programs that state departments of education were launching statewide. In the remainder of this section I will briefly describe the perspectives and understandings which guided our program development efforts. I will also describe the instructional improvement process and strategies for its implementation and dissemination which together form the BSIIP.

Key Perspectives and Understandings

During the early years of RBS (1965-1973), the laboratory was deeply involved with the Learning, Research and Development Center (LRDC) of the University of Pittsburgh in the development and dissemination of a series of programs called Individually Prescribed Instruction (IPI). The IPI years contributed much to the formation of the perspectives of the staff who were to develop BSIIP. Later, the emerging research on effectiveness of classrooms, schools, and school districts enhanced and supplemented these basic perspectives. Without attempting to be exhaustive, a few of the key perspectives which shaped program development are listed below:

- Just as students differ from each other so do classrooms, teachers, administrators, schools, and school districts.
- Some of these differences markedly affect instructional effectiveness and the capacity of educators to renew and reform their conduct of schooling.
- Because the particular influences on instruction vary across sites and over time, universal prescriptions for instructional improvement are not likely to be universally successful.
- Because the influences on effectiveness vary across time and settings, different settings call for different decisions about improvement actions.
- Problem-solving and decision making are the essence of teaching and supervision.
- Research findings which relate conditions and processes of schooling to measures of outcomes are particularly helpful for local efforts to identify and exploit opportunities to improve instructional effectiveness.

These perspectives came together at a propitious time. By the middle of the 1970s, low student achievement was a foremost concern of the public and educators. State and local education agencies were mounting their own assistance efforts and were open to promising proposals that might render

their efforts more potent. Such efforts assumed that standardized achievement testing was accurately identifying school districts, schools, classrooms, and even students in need of improvement. Implicitly, the identification of achievement needs was expected to prompt changes by practitioners in the conditions and processes of schooling which would, in turn, correct the achievement deficiencies.

However, no organized knowledge base or reliable procedures then existed for (1) relating achievement deficiencies to their underlying causes; or for (2) matching improvement opportunities (once identified) with appropriate corrective actions. What seemed to be needed were (1) a potent, well organized knowledge resource that would make clear to practitioners some especially important relationships between and among classroom dimensions, and between these key dimensions and student achievement; and (2) a practical process for monitoring and later managing the classroom dimensions to improve instruction.

Classroom Focus Variables

It is possible to get too much of a good thing, and the proliferation of classroom variables described by researchers is a case in point. Researchers have identified literally hundreds of classroom dimensions which correlate with student achievement. Certainly, teachers could not be expected to monitor and manage systematically so many variables. However, simple reflection on these correlates of achievement suggested that some may be more important than others, and some more amenable to teacher control as well. Theories and models which relate classroom conditions and processes to student achievement (especially Carroll, 1963; Cooley &

Lohnes, 1976) helped us choose a small set of "focus" variables. The variables which seemed to warrant regular monitoring by teachers and administrators fall into two categories: student variables and teacher variables.

We made a strategic decision with BSIIP to focus on student classroom variables for two important reasons. First, evidence and logic convinced us that student classroom behavior was most directly related to student achievement. Second, many teachers fear observations of their classroom performances. This fear might have caused them to resent participation and to stymie program development from the beginning.

Although many student-classroom variables bear a significant relationship to student achievement, we were able to select a small set which was compatible with the theory and models we followed, which appeared readily subject to teacher control, and for which we might obtain useful data to guide monitoring and management by practitioners. These variables and some of the research sources which indicated their importance to us are:

Prior Learning	(Bloom, 1976; Bracht and Hopkins, 1972; Gagne, 1970; Glaser, 1965).
Student Engaged Time	(Anderson, 1973; Arlin, 1973; Block, 1970; Fisher et al., 1978; Stallings and Kaskowitz, 1974).
Criterion Content Coverage	(Brady et al., 1977; McDonald, 1976; Walker and Schaffarzick, 1974).
Daily Success, Mastery, and Review	(Bloom, 1976; Fisher et al., 1978; Gagne, 1970; Glaser, 1965).

Taken together, these variables can support a potentially powerful statement about student classroom behavior and its relationship to achievement:

> Classes which bring to bear more relevant prior learning in their acquisition of criterion objectives and who spend more engaged time successfully covering, mastering, and reviewing the content on which they will be tested are more likely to score higher than otherwise comparable classes.

It is important also to reflect on the relationship of these variables to each other. Even brief consideration indicates that these variables are all highly intercorrelated. The research also bears this out. Therefore, practitioners were cautioned not to take a single variable approach to instructional improvement. The reality is that each of the "focus" variables should be maintained at an optimal level; the whole cluster should be monitored and appropriate classroom adjustments made on the basis of data-based diagnoses.

Of course, the focus variables are also related to many other classroom variables, and this presents a problem. Teachers simply cannot and should not be asked to monitor excessively. BSIIP developers likened the set of focus variables to the physician's set of "vital signs." So long as monitoring indicates that the focus variables are at appropriate levels, practitioners can reasonably regard instruction as stable and effective. Indications that any of the focus variables is at an inadequate level is a signal to search for other classroom variables which are negatively influencing instructional effectiveness.

Process for Monitoring and Managing Classroom Variables

Teachers and administrators who wish to use research findings to improve instructional effectiveness need help in carrying this out. BSIIP provided specially tailored background information and data banks on the student classroom focus variables, but this was just a beginning. Knowledge

and data do not apply themselves. Educators need an improvement process backed up with instrumentation and procedures.

Figure 1 depicts a Four-Phase Improvement Cycle, the BSIIP process for using research findings to improve student classroom focus variables and instructional effectiveness. In Phase I, educators collect information on the selected class behaviors. The process calls for the educators to use these data in Phase II to diagnose opportunities for improving classroom performance. The improvers then match these opportunities, in Phase III, with appropriate corrective actions selected from lists of teacher strategies which are supplied by BSIIP. In Phase IV, educators implement their corrective strategies in the classroom. In due course, teachers and administrators repeat Phases I and II to ascertain the efficacy of their improvement efforts. If necessary, they repeat Phases III and IV in pursuit of the elusive improvements.

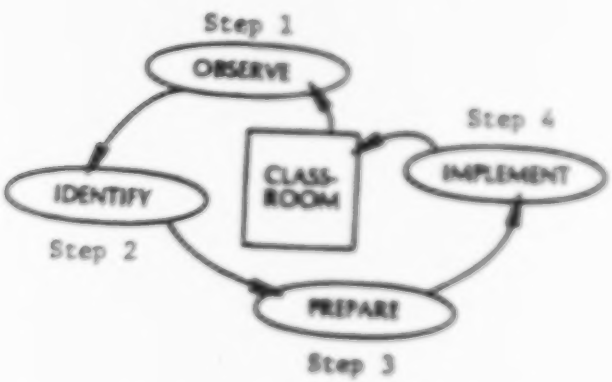

Figure 1. Four-phase improvement cycle.

Data collection instruments and procedures provided by BSIIP are, where possible, close approximations of those used in the research studies from which the process-product data were secured. This was done so that

educators could predict the year-end achievement of their classes by matching their process data to the process-product (achievement) data reported by the researchers.

Process-product data are not available for a number of classroom variables. We urged educators in these cases to improvise both data collection and data evaluation methods. It seemed to us that reasoned decisions about class improvement opportunities based on estimated data and tentative standards should be preferred to guesses or no decisions at all. Even when data and standards are proxies, use of the improvement cycle enables practitioners, over time, to confirm or adjust their tentative standards on the basis of process-product data collected in their own classes and schools.

It may be recalled above that we made a program development decision to focus on student classroom performance. Now it should be noted that in Phase III, educators are led to select teacher strategies (actions) which either directly or indirectly (acting through other classroom variables) effect needed improvements in the classroom focus variable(s) of concern to the teacher.

In short, the improvement cycle provided to teachers and administrators a means of controlling certain student classroom focus variables which appear to be highly and directly related to student achievement. The cycle is described in more detail in Helms and Graeber (1983), Huitt and Caldwell (1984), and Huitt and Rim (1980).

Strategies for Developing and Implementing BSIIP

We were committed from the beginning of BSIIP to draw on the best that was known about instructional effectiveness and educational change in our

development of the program. Moreover, we were determined to plan for the development and implementation of BSIIP in conjunction with the development of the instructional improvement technology itself and in the same time frame. The literature on educational change was replete with accounts of unanticipated local resistance to innovative programs created elsewhere in other times. We did not want to relive that history.

As is the case with instructional effectiveness, the findings of research on educational change are voluminous. However, keeping in mind our development objectives, RBS' own experience with implementation, and the conditions we thought would affect the degree to which teachers and administrators would use a research-based approach to instructional improvement, we planned to give special attention to two categories of change variables. One category of variables related to transportability of the program; the other category related to ways and means of enhancing positive participation of administrators and teachers in the development and use of BSIIP.

Every effort was made to maintain the transportability of BSIIP by assuring that:

- Materials would be developed to convey knowledge, data, and training to facilitate use of processes and to preserve their integrity.
- The methods and materials of BSIIP which needed to be kept free from local adaptation in order to preserve program integrity would be kept to a minimum.
- Instruments, processes, knowledge bases, implementation responsibilities and training would be as simple as possible and explicit.
- Materials, training, and implementation would be within the cost range normally allowed by school districts.

- Neither implementation nor dissemination would require radical alteration of the existing organization of staff.

However transportable the eventual program, it also needed to be received by educators before it could be used effectively. To assure reasonable receptivity, at least, we adopted these guidelines:

- The existing organizational structures would be approached top-down to locate school administrators and teachers who would be partners in the development of BSIIP.
- Educators would be enlisted as co-developers of BSIIP to secure supportive participation in program development. Later, "redevelopment" would be stressed as a means of spreading the concept to new school districts and schools.
- Small groups of volunteer teachers would be welcomed as co-developers to facilitate development and, later, to seed implementation in new schools.
- Public recognition of successful development and implementation would be promoted to increase local use of the program.
- Turnkey training would be emphasized as a means of developing and sustaining local improvement capacity. Later, working with state agencies, turnkey training would be the strategy for coping with implementation in large numbers of school districts and schools.
- Where necessary to assure a reasonable prospect for implementation success, BSIIP would give special attention to limited but essential organizational development of user schools and districts.

Although it was intended that these guidelines would receive as much attention in BSIIP training materials as the precepts concerning transportability, this was never accomplished. For further documentation of our attention to educational change research in the development of BSIIP, see Helms (1980) and Graeber (1980).

RBS Experience with Development and Implementation of BSIIP

During the years 1978-1981, we devoted our time to the development of the instruments, procedures, and training that were necessary for educators

to use the improvement process of BSIIP effectively. We made every effort to collaborate fully with teachers and administrators in the development and testing activities. In this collaboration we provided the basic concepts and first approximations of materials for training and implementation. Our educator partners supplied alternative perspectives based on their experiences and critiqued draft methods and materials. Subsequently, RBS revised and refined program elements based on feedback from pilot tests conducted with our partners.

As an overall judgement, I must say that collaborative development of the program and materials using a process of review, testing, and revision was very successful. Nevertheless, there were naturally different interests and points of view that caused tensions between us and our partners. Our interests were to develop an effective improvement process which would be faithful to the research on which it was based. Our partners were rightfully concerned with practicality and the welfare of those who were involved in development and who would later be affected in some way by use of the program.

Some of our more important learnings from this experience are:

- Well-developed materials for training and implementation were probably the most important help to wide and successful use of elements of BSIIP.
- In addition to the benefits which BSIIP intended for its users came many other benefits which the users found for themselves. The most common unintended benefit was better communication among teachers and between teachers and principals.
- Teachers and administrators were, finally, not so interested in participating in development for the unique experience it afforded but for the opportunity to shape the program in ways which would assure practicality and protect their professional interests.

- It was a continuing challenge, never fully met, to produce methods and materials that were at the same time valid, simple to use, and effective. But, we learned that program success is, ultimately, highly dependent on such materials.

- Cost need not be a problem. Indeed, we found that even poorer districts have ways of financing reasonable amounts of training and materials.

- It was difficult for some schools and districts to understand the nature of a "program" that did not create new subsidized positions. However, by not creating new positions, even temporarily, we seemed better able to sell the concept that effective instruction is the regular business of regular staff.

- Working with the state education system top-down proved to be an effective way of locating school districts, schools, and teachers who made good partners. Officials used their personal network of friends to find partners for us. This seemed to invest the development effort with special importance.

- True voluntary participation was difficult to define let alone identify in the field. In any event, the perceived worth of the program and its purpose appeared to be a greater influence on participation of teachers than the initial reason for their involvement.

- Although the elements of BSIIP were never brought together and implemented as a program during the development period, it was still evident that success of voluntary groups of teachers did not generally lead to greater involvement within or across buildings. In fact, there was reason to believe that some small groups of teachers were isolated by their colleagues because of, or in spite of, their success.

- Turnkey training appeared to be successful with people from a variety of education agencies according to their talent for training and experience with it. However, it was readily apparent that many administrators, including principals, do not believe that their positions require them to train. Frequently, they are fearful of training and prefer to delegate the job to others. Nevertheless, with adequate training of their own and adequate support, many can become effective trainers. Some come to enjoy it and take pride in their new competence.

- We learned that behavioral change requires understanding, practice, and coaching for the one who is expected to change--and practice and coaching and practice and coaching, etc!

- Schools and school districts which suffer from low achievement and poor instruction almost always suffer from poor organizational development as well. The good news is that selective organizational development efforts can be tied to the innovation process and increase the probability that the innovation will be implemented reasonably well.

The development effort produced a variety of materials to support training and implementation of BSIIP. Trainer's guides for managing instructional time and instructional content included introductory material on BSIIP, research on the relevant variable, and helpful background information. (There were limited research findings for daily success, mastery, and review that would support extensive monitoring of these variables, so it made more sense to include the available information in the trainer's guides for time and content.) The guides were addressed to trainers who could be lead teachers, curriculum supervisors, principals, or linkers from a state or intermediate service agency. Originally the guides were intended for teachers, but teachers clearly indicated that they did not want to cope with these hefty volumes, and the cost of reproducing the guides would have been prohibitive if they had. Subsequently, information of special importance for teachers was incorporated into handouts which teachers received during their training sessions.

From the beginning of the development effort, videotapes of elementary classes were prepared and used to train administrators and teachers in the classroom observation process. Our success with these tapes led us to prepare support tapes for trainers on the specifics of some of the more complex instruments and procedures. These tapes relieved the anxieties of many new trainers. They were also designed to keep the trainers regularly involved in the training which set a good example for the trainees and continually improved the trainer's own grasp of the program.

Finally, the guides included implementation checklists. These came as a response to the implementation concerns of local development groups. They also became an effective device for directing attention to organizational improvements that would be needed to accomplish effective implementation of BSIIP.

BSIIP Becomes "Teaching Variables (TV)" in SITIP

In the fall of 1980, we were invited by the Maryland State Department of Education (MSDE) to include BSIIP in Maryland's program for School Improvement Through Instructional Processes, or SITIP. Work in Maryland was not supported by BSIIP funding which was supplied by the National Institute of Education (NIE). However, the invitation was appealing. The elements of BSIIP were approaching completion and we were looking forward to testing the program as a whole.

MSDE agreed to underwrite part of the cost, and the RDx group of RBS (which was funded to serve Maryland) also agreed to help. We accepted the invitation to participate in SITIP with the understanding that this would include an overview presentation on BSIIP for school district teams in February 1981, summer training for district teams that intended to implement BSIIP, and one or more technical assistance days in the fall of 1981 for implementing schools.

Prior to the February presentation, we held planning sessions with officials of MSDE and settled arrangements for February and the outlines of the summer training week. We emphasized that our experience developing BSIIP had convinced us that adequate training was essential for implementation. We indicated that time and content training would take five days at

least. Moreover, district and school leadership should be involved in the training and should lead local implementation. During these discussions, BSIIP was relabeled as the "Teaching Variables (TV)" program in SITIP.

We made our orientation presentation in February 1981 as planned. Teams from each county school district attended. These teams included district staff, principals, and teachers. Subsequently, we met on several occasions with MSDE staff to plan the summer training for the several districts which had opted to implement TV. We continued to stress the need for district/principal leadership for local training and implementation. MSDE was able to provide for only three days of training for district teams but insisted that training cover both time and content. We agreed to this schedule and agenda.

Training was conducted for the district in July. MSDE had done a good job of producing materials for training and arranging comfortable accommodations. However, the setting may have been too attractive for long sessions of intensive training. Many of the teachers had not attended the February presentation and more time had to be given to an overview of TV than was planned. The trainers made a valient effort to compress the five days of training into the three available days. Unfortunately, the third day ended unexpectedly early. As a result, even the rudiments of local implementation were slighted.

As planned, we made several follow-up visits to districts in the fall of 1981 and over the next year. These follow-ups were frequently more general and consultative than the technical assistance workshops which we expected to deliver to support full implementation of TV. In fact, long periods seemed to have expired between training and local implementation.

In many cases, district teams had opted to implement only one component, usually management of instructional time. Even in these cases, the implementation of improvement strategies seemed to have been neglected in favor of data collection and evaluation. This may have been due in part to the departure of trained personnel.

We were very encouraged by a few schools which seemed to be highly involved with their implementation, integrating the approach into their own organizational patterns and even investigating the potential of the computer to support the improvement process. We were impressed that these active schools were usually led by a dynamic principal. Nevertheless, a general survey evaluation (Roberts & Kenney, 1985) reported that there was very little use of TV with corresponding small effects.

Metamorphosis of BSIIP, Achievement Directed Leadership

In the spring of 1981, NIE sent a team of evaluators to RBS to review the BSIIP project. The team approved of the work they saw and strongly recommended that we put the emerging elements of BSIIP together and subject the program, as a whole, to an intensive pilot test. They also recommended that we join with a cooperative school district to achieve the conditions that would be conducive to program effectiveness for the schools of most interest, i.e., urban schools serving disadvantaged and minority students.

Field Test

Although the field test was conducted in three school districts, the main effort was in an urban New Jersey school district which was deeply committed to improving instructional effectiveness for its largely minority

and disadvantaged students. In the interest of achieving a districtwide implementation (at least in the eight elementary schools) and the active support of district leadership, we pressed for a top-down implementation of the program. Moreover, we were convinced by this time that the secret to improving school and district effectiveness is locating teachers and administrators in need and providing them the inservice and other support that will enhance their efficacy.

Planning for the implementation of the program was begun with the superintendent in order to enlist districtwide involvement quickly and expedite the whole implementation process. The district leadership subsequently enlisted its central office Department of Instruction (DOI) staff and principals in the planning process through monthly implementation seminars. This approach to districtwide planning became a standard feature of the BSIIP program.

RBS staff conducted training for principals in August 1981 immediately preceding the opening of the schools. The superintendent set a positive climate for training with his opening remarks which made clear his wish and that of the school board that everyone would improve his/her effectiveness. His opening-of-school speech put the whole district on notice that everyone would be working hard for improved effectiveness all year.

In a strategic move to support principals with training and implementation, the district leadership paired each principal with a DOI person. This proved to be an effective strategy. Training of teachers was completed satisfactorily in most schools by early to mid-October. Then came the realization by RBS staff as well as district leadership that at this point BSIIP assumed that teachers and principals would on their own initiative

pursue implementation of the program, regularly conducting classroom observations and taking steps to exploit classroom improvement opportunities as they were identified. Our intuition and experience said that this was an unrealistic expectation. Intelligence gathered in classrooms and schools confirmed the suspicion. These things were not happening on their own. In consultation with district leadership, we decided on two courses of action: (1) continuation of the implementation seminars for principals, focusing on the mechanics of transferring training outcomes into practice; and (2) institution of an instructional leadership plan which had been germinating for some time in the minds of RBS staff.

The chief features of the leadership plan are depicted in Figure 2. In brief, the plan calls for each level of school system to support the improvement efforts of those for whom they are responsible. The research findings to support the plan become successively fewer and weaker as one moves away from the classroom, but they do suggest the roles and functions of the plan. Samples of the research that influenced the specification of teacher functions are: Medley, 1977; Rutter et al., 1979; Cooley & Leinhardt, 1980; Kounin, 1977; Emmer & Evertson, 1981. Samples of research on schools that helped specification of principal functions are: Edmonds, 1979; Wellisch, MacQueen, Carriere & Duck, 1978; Weber, 1977; Lipham, 1977. The district functions rest mostly on our own perceptions as we assessed the implementation and on a study by Berman and McLaughin (1979).

The addition of the leadership roles and functions to the classroom improvement process led to the program's new label, Achievement Directed Leadership.

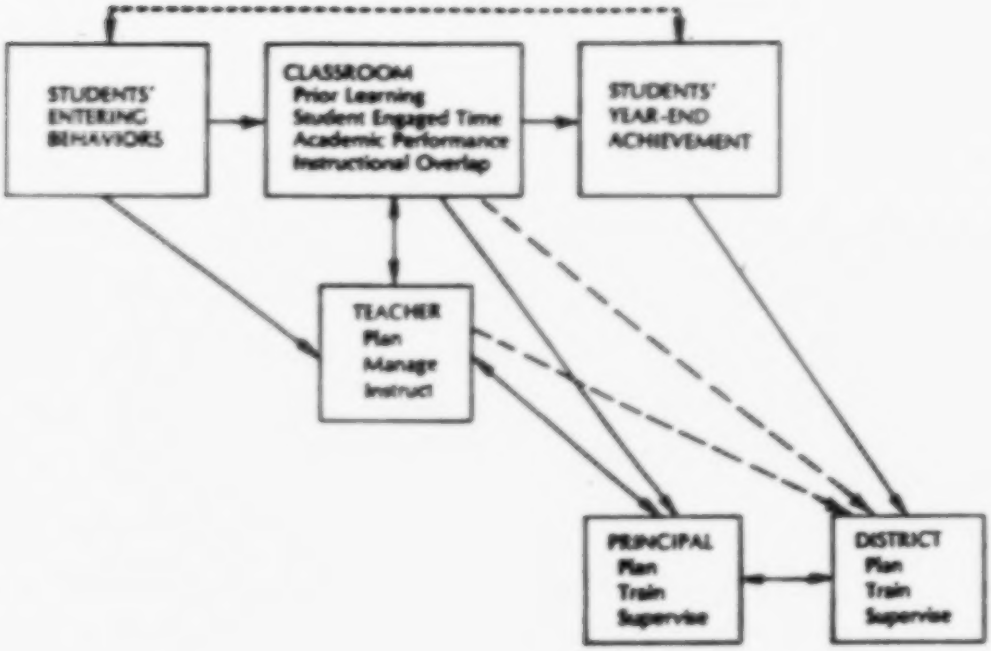

Figure 2. The leadership plan.

Evaluation

Evaluation of program implementation and its apparent effects on student achievement encourage us that ADL is an valid means of improving instructional effectiveness (see Biester et al., 1983). Briefly, impressive gains in achievement were recorded by all grades for reading and math and these gains could reasonaby be related to the effectiveness with which schools implemented the program.

The keys to effective implementation appear to be (1) tieing organizational capability to perform the goal of improving instructional effectiveness; and (2) informing organizational improvement efforts of roles and functions that relate to instructional effectiveness. Among the functions of principals and district leadership, one that appears to be

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especially important is participatory supervision. We liken participatory supervision to Joyce and Showers' (1980) coaching-on-the-job.

Problems and Promises for the Future

We are encouraged by our experience in developing and testing Achievement Directed Leadership that the data-based improvement process can be the means for rendering clinical supervision more effective. And, we are convinced that effective supervision can be the means to more effective instruction and improved student achievement.

However, the probability that these events will come to pass will depend upon the willingness of educators to subsume their adult concerns about work conditions and rewards to the goal of improving instruction. If this is accomplished there may be hope for removing the barriers to improvement of organizational and staff effectivenes.

REFERENCES

Anderson, L. W. (1973). Time and school learning. Unpublished doctoral dissertation, University of Chicago.

Arlin, M. (1973). Learning rate and learning rate variance under mastery learning conditions. Unpublished doctoral dissertation, University of Chicago.

Berman, P., & McLaughlin, M. W. (1979). An exploratory study of school district adaptation. Santa Monica, CA: Rand.

Berman, P., & Pauly, E. W. (1975). Federal programs supporting educational change: Factors affecting change agent projects (Vol. 2). Santa Monica, CA: Rand.

Block, J. H. (1970). The effects of various levels of performance on selected cognitive, affective, and time variables. Unpublished doctoral dissertation, University of Chicago.

Bloom, B. S. (1976). Human characteristics and school learning. New York: McGraw-Hill.

Bracht, G. H., & Hopkins, K. D. (1972). Stability of educational achievement. In G. H. Bracht, K. D. Hopkins, & J. C. Stanley (Eds.), Perspectives in educational and psychological measurement. Englewood Cliffs, NJ: Prentice-Hall.

Brady, M. E., Clinton, C., Sweeney, J. M., Peterson, M., & Poynor, H. (1977). Study Findings: Final report of the instructional dimensions study, 1976-1977. Washington, DC: Kirschner Associates.

Brophy, J. E., & Evertson, C. M. (1974). Process-product correlations in the Texas Teacher Effectiveness Study: Final report. Austin: University of Texas.

Carroll, J. B. (1963). A model of school learning. Teachers College Record, 64, 723-733.

Cooley, W., & Leinhardt, G. (1980). The Instructional Dimensions Study. Educational Evaluation and Policy Analysis, 2, 7-25.

Cooley, W., & Lohnes, P. (1976). Evaluation research in education. New York: Irvington.

Dunkin, M. J., & Biddle, B. J. (1974). The study of teaching. New York: Holt, Rinehart, & Winston.

Edmonds, R. R. (1979, March-April). Some schools work and more can. Social Policy, 28-32.

Emmer, E. T., & Evertson, C. M. (1981). Synthesis of research on classroom management. Educational Leadership, 38(4), 342-347.

Fisher, C. W., Filby, N. N., Marliave, R., Cahen, L. S., Dishaw, M. M., Moore, J. E., & Berliner, D. C. (1978). Teaching behaviors, academic learning time and student achievement: Final report of Phase III-B, Beginning Teacher Evaluation Study in Beginning Teacher Evaluation Study Technical Report Series (Technical Report V-1). San Francisco: Far West Laboratory for Educational Research and Development.

Fullan, M. (1981). School district and school personnel in knowledge utilization. In R. Lehming and M. Kane (Eds.), Improving schools: Using what we know. Beverly Hills, CA: Sage.

Graeber, A. O. (1980). A Basic Skills Instructional Improvement Program: Utilizing research to facilitate implementation and dissemination. Paper presented at the annual meeting of the American Educational Research Association, Boston.

Gagne, R. M. (1970). The conditions of learning. New York: Holt, Rinehart, & Winston.

Glaser, R. (1965). Toward a behavioral science base for instructional design. In R. Glaser (Ed.), Teaching machines and programmed learning: Data and directions. Washington, DC: National Educational Association of the United States.

Good, T. L., & Grouws, D. A. (1979). Teaching and mathematics learning. Educational Leadership, 37(1), 39-45.

Helms, D. C. (1980). A basic skills instructional improvement program: An overview. Paper presented at the annual meeting of the American Educational Research Association, Boston. (ERIC Document Reproduction Service No. 190 596)

Helms, D. C., & Graeber, A. O. (Eds.). (1983). Achievement Directed Leadership: Managing instructional time, training workshops for central office staff, principals, and teachers. Philadelphia: Research for Better Schools.

Huitt, W. G., & Caldwell, J. (1984). Time and instructional improvement: An R&D-based approach. In L. W. Anderson, (Ed.), Time and school learning: Theory, research and practice. New York: St. Martin's Press.

Huitt, W. G., & Rim, E. (1980). A basic skills instructional improvement program: Utilizing research to improve classroom practices. Paper presented at the annual meeting of the American Educational Research Association, Boston.

Joyce, B. (1982). Organizational homeostasis and innovation. Education and Urban Society, 15 (1), 42-69.

Joyce, B., & Showers, B. (1980). Improving inservice training: The message of research. Educational Leadership, 37 (5), 379-385.

Kounin, J. S. (1977). Discipline and group management in classrooms. Huntington, NY: Robert E. Kreiger.

Lipham, J. M. (1977). The administrator's role in educational linkage. In N. Nash & J. Culbertson (Eds.), Linking processes in educational improvement. Columbus, OH: University Council for Administration.

Medley, D. M. (1977). Teacher competence and teacher effectiveness: A review of process-product research. Washington, DC: American Association of Colleges for Teacher Education.

McDonald, F. J. (1976). Research on training and its implications for policy making: Report on Phase II of the Beginning Teacher Evaluation Study. Princeton, NJ: Educational Testing Service.

Pincus, J., & Williams, R. C. (1979). Planned change in urban school districts. Phi Delta Kappan, 60 (10), 729-33.

Roberts, J. M. E., & Kenney, J. L. (1985). Implementing four models of instructional improvement. Philadelphia: Research for Better Schools. Paper presented at the annual meeting of the American Educational Research Association, Chicago, 1985.

Rosenblum, S., & Louis, K. S. (1981). Stability and change: Innovation in an education context. New York: Plenum Press.

Rosenshine, B., & Furst, N. (1973). The use of direct observation to study teaching. In R. M. W. Travers (Ed.), Second handbook of research on teaching. Chicago, IL: Rand McNally.

Rutter, M., Maughan, B., Mortimore, P., Ouston, J., & Smith, A. (1979). Fifteen thousand hours. Cambridge, MA: Harvard University Press.

Stallings, J. A., & Kaskowitz, D. (1974). Follow Through classroom observation evaluation, 1972-73. Menlo Park, CA: Stanford Research Institute.

Walker, D. F., & Schaffarzick, J. (1974). Comparing curricula. Review of Educational Research, 44(1) 83-111.

Weber, G. (1977). Inner city children can be taught to read: Four successful schools (Occasional Paper No. 18). Washington, DC: Council for Basic Education.

Wellisch, J. B., MacQueen, A. H., Carriere, R. A., & Duck, G. A. (1978). School management and organization in successful schools. Sociology of Education, 51(3), 211-227.